WHAT IS CLAIMED IS:

1. A semiconductor device comprising:

a semiconductor chip;

a first wiring formed on an insulation film formed on a front surface of the semiconductor chip;

a second wiring formed on the insulation film;

a supporting body bonded to the front surface and having an opening to expose at least part of the second wiring; and

a third wiring disposed on an additional insulation film formed on a back surface of the semiconductor chip, extending along a side surface of the semiconductor chip, and connected to the first wiring.

2. The semiconductor device of claim 1, further comprising a conductive terminal disposed on the third wiring.

3. The semiconductor device of claim 2, wherein the conductive terminal comprises a projecting electrode terminal.

4. The semiconductor device of claim 3, wherein the projecting electrode terminal is a solder bump or a gold bump.

5. A semiconductor device comprising:

a first semiconductor device comprising a first semiconductor chip, a first wiring formed on a front surface of the first semiconductor chip, a second wiring formed on the front surface, a supporting body bonded to the front surface and having an opening to expose at least part of the second wiring, and a third wiring disposed on a back surface of the semiconductor chip, extending along a side surface of the semiconductor chip and connected to the first wiring; and

a second semiconductor device disposed on the first semiconductor device, the second semiconductor device comprising a second semiconductor chip and a conductive terminal that is formed on a back surface of the second semiconductor chip and is connected to the second

wiring of the first semiconductor device through the opening of the supporting body.

6. The semiconductor device of claim 5, further comprising a conductive terminal disposed on the third wiring.

7. The semiconductor device of claim 6, wherein the conductive terminal comprises a projecting electrode terminal.

8. The semiconductor device of claim 7, wherein the projecting electrode terminal is a solder bump or a gold bump.

9. A method of manufacturing a semiconductor device, comprising:

providing a semiconductor wafer comprising a plurality of semiconductor chips, each of the semiconductor chips having a first wiring and a second wiring formed on an insulation film formed on a front surface of the semiconductor wafer;

bonding a supporting body to the front surface of the semiconductor wafer;

forming a third wiring on an additional insulation film formed on a back surface of each of the semiconductor chip so as to extend along a side surface thereof and connect to a corresponding first wiring, the back surface of the semiconductor chip corresponding to a back surface of the semiconductor wafer; and

forming for each of the semiconductor chip an opening in a corresponding supporting body to expose a corresponding second wiring.

10. The method of manufacturing a semiconductor device of claim 9, further comprising removing a surface portion of the supporting body.

11. The method of manufacturing a semiconductor device of claim 10, wherein the removing of the surface portion comprises dropping an etching solution to the surface portion and rotating the supporting body.

12. The method of manufacturing a semiconductor device of claim 9, further

comprising cutting the semiconductor wafer to separate the plurality of semiconductor chips.

13. The method of manufacturing a semiconductor device of claim 9, further comprising forming a conductive terminal on each of the third wirings.

14. The method of manufacturing a semiconductor device of claim 9, further comprising forming a plating layer on each of the second wirings through the opening in the supporting body.

15. The method of manufacturing a semiconductor device of claim 12, further comprising connecting a conductive terminal of another semiconductor device to the second wiring of one of the separated semiconductor chips through the opening of the supporting body.